

WHAT IS CLAIMED IS:

1. A planar dielectric integrated circuit, comprising:
a planar dielectric line such that a first slot is provided by disposing two conductors at a fixed distance on a first main surface of a dielectric plate, a second slot, which opposes the first slot, is provided by disposing two conductors at a fixed distance on a second main surface of said dielectric plate, with the area sandwiched between said first slot and said second slot of said dielectric plate being formed as a plane-wave propagation area;
a slot line formed at the end portion of said planar dielectric line of said dielectric plate;
line-conversion conductor patterns which are connected to said planar dielectric line and which are used to perform mode conversion with it and the slot line; and
electronic components disposed in such a manner as to be extended over said slot line.
2. A planar dielectric integrated circuit according to claim 1, wherein said line-conversion conductor pattern is provided at positions on both ends of said slot line, and said electronic

components are disposed in nearly the central portion of said slot line.

3. A planar dielectric integrated circuit according to claim 2, wherein a short stub which is used to obtain impedance matching between said line-conversion conductor pattern and said electronic components is provided at the midpoint of said slot line.

4. A planar dielectric integrated circuit according to ~~one~~ of claim 1, wherein an impedance matching circuit is provided between said line-conversion conductor patterns and said slot line.

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